DOCUMENT RESUME

ED 164 821 CE 018 484

TITLE Employee Training in the Federal Service. Fiscal Year 1977.
INSTITUTION Civil Service Commission, Washington, D.C. Bureau of Training.
PUB DATE [78]
NOTE 58p.; For a related document see ED 155 364

EDRS PRICE MF-$0.83 HC-$3.50 Plus Postage.
DESCRIPTORS *Administrative Agencies; Blacks; Caucasians; Costs; Educational Needs; Employment Qualifications; *Federal Programs; Females; *Government Employees; Interagency Coordination; Males; Management Development; Management Education; Minority Groups; *Professional Training; Program Evaluation; Program Improvement; Staff Improvement; *Training Allowances; Training Objectives; *Trend Analysis
IDENTIFIERS Government Employees Training Act; United States

ABSTRACT

Information on training covered under the 1958 Government Employees Training Act, chapter 41, title 5, United States Code, is presented in this congressionally mandated annual training report. It provides statistical and general trend information and analyses regarding federal training under the Act. The report begins with a statistical table which summarizes selected information from the fiscal year 1977 training experience. The remainder of the report is divided into four sections. Section 1 reviews efforts to improve training management in the federal service and presents a summary of training of 120 days and less (short-term training). Section 2 discusses interagency training centers and their major areas of emphasis. The third section displays and analyzes data submitted by agencies in connection with their training activities. This information is presented in terms of the total government effort. Long-term training is included. The final section shows training data on an agency-by-agency basis. The report ends with an index. The report emphasizes the purpose of the training, its principal subject matter, and the source of training. (For training information relative to fiscal years 1974-76 see ED 155 364.) (CSS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

018 484 CE018484 ED164821

Employee Training in the Federal Service

FISCAL YEAR 1977

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

U.S. Civil Service Commission
Bureau of Training

TLP-323 7-78

2

Contents

Foreword vii

Introduction 1

Purpose 1
Organization of the Report 1
Government-Wide Training Data, FY 1977, Chart 1, A Quick Reference for Training Information 2

1. **Summary** 5

Purpose for Training 6
Improved Management of the Training Function 6
Research and Development 7
Training Assistance 8
Resource Coordination and Information Dissemination 8
Increased Effectiveness of Trainers 9
Improved Career Planning for Public Service Employees 10
Government-Wide Training Data, FY 1977, Chart 2, Training Summary (for training of 120 days and less) 11

2. **Interagency Training Centers** 13

Federal Law Enforcement Training Center 14
Interagency Auditor Training Center 15
Foreign Service Institute 16
Federal Acquisition Institute 17
Occupational Safety and Health Administration Training Institute 18

3. **Government-Wide Training Effort** 21

Expenditures by Source 22
Chart 3, Where the Training Dollar Went, FY 1977 24
Chart 4, Comparison Among Sources of Training, FY 1977 25

Trends in Training 26
Chart 5, Cost of Training (graph) 27
Chart 6, Hours of Training (graph) 27
Chart 7, Average Length, in hours, of Training Occurrence 28
Chart 8, Average Cost per Training Hour 29
Chart 9, Average Cost per Training Occurrence 30

Areas of Training Emphasis 31
Chart 10, Purpose for Training, FY 1977 (graph) 32
Chart 11, Purpose for Training, FY 1977 (table) 33
Chart 12, Principal Subject Matter, FY 1977 (graph) 34
Chart 13, Principal Subject Matter, FY 1977 (table) 35

Distribution of Training 36
Indicators of Training Distribution 36
Chart 14, Percent of Duty-Time Hours Spent in Training, FY 1977 37
a. By Minority Group Designation 37
b. By Pay System 37
Index of Training Equity 38
Chart 15, Index of Training Equity, FY 1977 40
a. By Minority Group Designation 40
b. By Pay System 40
Chart 16, Non-Salary Cost by Pay System, FY 1977 41

4. Agency Training Efforts 43

Agency Abbreviations 44

Chart 17, Hours of Training 46
Chart 18, Non-Salary Costs of Training 48
Chart 19, Training Occurrences 50
Chart 20, Long-Term Training, FY 1977 52
Chart 21, Training Provided to Employees of State and Local Governments by Federal Agencies, FY 1977 53

Index 54

Foreword

This report covers in detail the past year's training accomplishments in the Federal Government. We would like to take this opportunity, not to recount those accomplishments, but to talk about future initiatives.

Executive development has emerged as a critical area of concern. In fact, the Civil Service reform proposals rest on the premise that a professionally trained corps of Government managers will be available to meet the requirements of a more productive and responsive Government. The proposed Senior Executive Service, in order to develop and maintain this corps, must have available a life-long program which will meet these emerging demands on our top-level managers. Classroom instruction will be only a small part of such a program; on-the-job and developmental assignments will constitute the bulk of the training.

Evaluation of training is another process we intend to promote. Evaluation's potential for increasing both the efficiency and effectiveness of training has long been recognized. The state of the art has now evolved to the point where realistic instruments exist for achieving that potential. Our emphasis, therefore, will be on distributing information about these instruments to agencies and consulting when needed in the implementation process.

The twenty years since the enactment of the Government Employees Training Act in 1958 have seen great advances in the field of employee development in both the Government and the private sector. These advances cannot be adequately reflected in the numerical totals of a report such as this. Innovations in both the hard- and software of learning—programmed instruction, teaching machines, educational TV, computer assisted instruction—have increased the professional demands on instructiors while greatly enhancing the potential efficiency of the learning process. Looking ahead, the most significant advance we anticipate in the training field over the next several years is in improved training management to capitalize on the technological advances of the recent past. The instruments now exist—our challenge lies in applying them.

6

Bureau of Training

Introduction

Purpose

Employee Training in the Federal Service is a congressionally mandated annual training report. It presents information on training covered under the Government Employees Training Act, chapter 41, title 5, United States Code. And it serves as the central source document of statistical and general trend information and analyses regarding Federal training activities under the Act.

Previous reports covered the period July thru June. This and future reports will cover the period October thru September.

Organization of the Report

The report begins with a statistical table which summarizes selected information from the FY 1977 training experience.

The remainder of the report is divided into 4 sections:

Section 1 reviews efforts to improve training management in the Federal service and presents a summary of training of 120 days and less (short-term training).

Section 2 discusses interagency training centers and their major areas of emphasis.

Section 3 displays and analyzes data submitted by agencies in connection with their FY 1977 training activities. This information is presented in terms of the total Government effort. Long-term training is included.

Section 4 shows training data on an agency-by-agency basis. These data are not intended for use by those who wish to make in-depth, comparative inferences between or among the various agencies. Information for this purpose may be obtained from the U.S. Civil Service Commission's Bureau of Training. However, agency training officials can draw some general inferences about their own agencies from the data included.

The report ends with an index. This allows the reader to review the reported items in varying contexts.

Numeric information contained in this report places a heavy emphasis on the Why?, What?, and Source? of training. The "why" question is answered by the **purpose** of training, and reflects management's decision regarding the employee's need for training. The "what" question is answered by the **principal subject matter** and emphasis of the training provided the employee, and not the position of the person trained. The **source** of training answers "Where" the training was given or who gave it.

In short, this report attempts to present an outline of the FY 1977 training experience. It is hoped that the report will be useful not only to the Congress in assessing the state of employee training, but also to agency management and training personnel at all organizational levels.

Government-Wide Training Data, FY 1977

Chart 1: A Quick Reference for Training Information

I. Volume of Training (overall)

Training Occurrences[1]	883,087
Individuals Trained (Some individuals participated in more than one training occurrence)	555,544
Hours of Training	37,464,999

II. Cost of Training (overall)

Total Expenditures	$256,941,055	100.0%
Direct Costs		
Salaries of Training Personnel	$96,948,991	37.7%
Tuition, Fees, Books, etc.	$62,765,015	24.4%
Indirect Costs		
Travel and Per Diem	$97,227,049	37.8%

III. Cost Comparison Among Sources (for training of 120 days and less—Short-Term)

VI. Specialty/Technical (Short-Term, Subject Matter)

Training Occurrences[1]	290,135
Percent of Total Training Occurrences	32.9
Approximate Expenditures[2]	$115,133,000
Approximate Percent of Total Training Costs	45

VII. Administration/Analysis (Short-Term, Subject Matter)

Training Occurrences[1]	151,503
Percent of Total Training Occurrences	17.2
Approximate Expenditures[2]	$30,941,000
Approximate Percent of Total Training Costs	12

VIII. Comparison Between Training Occurrences and Individuals Trained (Short-Term, Averages)

Average Cost per Training Hour [2]

In-house	$7.28
Interagency	$5.90
Non-Government Short-Term	$6.56

IV. Executive/Management Training (Short-Term, Subject Matter)

Training Occurrences [1]	56,240
Percent of Total Training Occurrences	6.4
Approximate Expenditures [2]	$20,060,000
Approximate Percent of Total Training Costs	8

V. Training to Improve Performance in Employee's Present Position (Short-Term, Purpose)

Training Occurrences [1]	563,226
Percent of Total Training Occurrences	63.8
Approximate Expenditures	$128,474,000
Approximate Percent of Total Training Costs	50

Percent of the Reporting Population Attending Some Training (Some individuals participated in more than one training occurrence)	26.4
Dollars per Training Occurrence [2]	290.96
Dollars per Individual Trained [2]	462.50
Hours per Training Occurrence	42.43
Hours per Individual Trained	67.44

IX. Long-Term Training (More than 120 Days)

Individuals Trained	741
Total Days of Training	136,076
Expenditures	$3,390,801
Percent of Total Training Costs	1.3

X. Percent of Duty-Time Hours Spent in Training

Federal employees spent only three-fourths of one percent of their duty time attending training.

[1] A training occurrence (also referred to as "instances" in previous reports) is defined as participation in formal training courses of eight hours' duration or longer.

[2] The expenditures for in-house training include the salaries of full-time instructors and the salaries of all part-time personnel who engaged in agency training activities during FY 1977. The cost of facilities is not included.

Section 1

1. Summary

Purpose for Training

The public has the right to be served by highly qualified Federal employees, fully trained and capable of applying to their jobs the best available work methods.

Executives and managers have the right to expect from employees performance that meet standards of excellence. Executives and managers also have the right to expect from training staffs professional advice and guidance of the highest quality. Along with these expectations go the responsibility to see that the necessary training and development are provided to employees.

Employees have the right to expect to receive training necessary to perform their jobs at a level of excellence that will be a justifiable source of pride. In addition, Federal employees should have access to adequate and equitable development opportunities.

The Commission undertakes the obligation to help meet these expectations. The Commission does this by:

- developing tools, techniques, methods, and services to carry out the training function,
- increasing the effectiveness of training specialists, and
- encouraging the establishment of career planning within agencies.

This three-pronged approach speaks to the public and to public institutions. It speaks to the improved delivery of goods and services. Therefore, it speaks to organizational effectiveness.

In this regard, the training or development of executives, managers, and individual employees is of vital concern. Efficiency and economy in Government operations must be achieved while maintaining high performance standards in the transaction of public business at all levels of Government.

The ways in which the Commission has moved to meet its obligations are discussed in the following paragraphs.

Improved Management of the Training Function

Training management is aided by developing tools, techniques, methods, and services to carry out the training function better.

This has been of continuing concern to the Commission's Bureau of Training. From this concern, the Bureau established the following goal: "To provide managers and training specialists with the means to manage and operate the training function of Government." Efforts toward these ends have intensified over the years.

Lead responsibility for these efforts is vested in the Bureau's leadership function. This activity includes (1) a state

of the art research and development service and (2) an outreach, training assistance, and resource coordination service.

Research and Development

Research and development tasks have been those of finding solutions to problems faced at some time by training officers in all agencies. Among these have been (1) the need to provide a means to collect accurate training cost data and (2) the need to establish a means to evaluate training. The interrelationship between cost and evaluation data can be used to assure Federal managers that the investments which they authorize in employee training are returning benefits greater than cost.

Cost Data

Accuracy of training cost data is necessary not only for reporting purposes as required by law, but also for planning and assessing the training function. This need clearly requires the following:

- Training cost accounting systems,
- Training recordkeeping procedures,
- Training audit and inspection procedures, and
- Training evaluation methodologies.

The Commission's Training Cost Model provides another means for meeting the General Accounting Office's requirements for accuracy and completeness of training costs.

Evaluation Data

The evaluation question, however, introduces a whole set of complexities. Some of these complexities may be deduced from the following definition of evaluation: "A planned process which provides specific, reliable information about a selected topic, problem, or question for purposes of determining value and/or making decisions." The concept of **value** ushers in many challenges. One challenge is how to evaluate and measure the benefits of training in relation to the investment made.

The Civil Service Commission conceived of a series of value models in order to meet a substantial portion of that challenge. These models necessarily entail and provide for:

- a means for measuring the benefits of training,
- a systematic planning process,
- a systematic identification of training targets, and
- the planning for and assignment of dollar and staff resources to accomplish the training effort.

The Bureau of Training has developed two value models, one for measuring the dollar benefits of training provided employees engaged in producing measurable outputs, and one for measuring the benefits of management or similar training. Additional efforts include developing and refining: cost and value models, planning processes, needs identification systems, and other evaluation models and methodologies.

Training Assistance

Agency training assistance was particularly active and extensive during FY 1977. This increased activity was a nationwide effort. Training assistance was not limited to the Federal sector but included limited services to State and local government employees as well.

Assistance projects are joint efforts between agency staff and staff of the Commission. These projects range from such things as the design and implementation of internal policy and procedural manuals to the more complicated design and implementation of nationwide training strategies.

A few examples of cooperative acitivities involving agency and central office staff are:

- the Department of Commerce (Census Bureau),
- the Department of Housing and Urban Development,
- the Commodity Futures Trading Commission, and
- the Federal Acquisition Institute (in cooperation with the Department of Justice and the Office of Management and Budget).

Regional Assistance Activities involved:

- the Department of Health, Education and Welfare (Social Security Administration),
- the Veterans Administration,
- the Department of the Interior (Bureau of Land Management, Bureau of Indian Affairs), and
- the General Services Administration.

Assistance projects have provided agency training officers with a means of direct access to resources which not only help them to meet many diverse needs, but also to retain within the agencies those capabilities that they learned while meeting those needs.

The outreach service has demonstrated repeatedly that agency trainers have the willingness and ability to employ better training procedures.

Resource Coordination and Information Dissemination

Efficient use of resources can begin with eliminating duplicative effort. One way of doing this is by communicating training information that assists agencies to meet their training goals and objectives in a timely and cost-effective way.

Two of the more significant vehicles for coordinating agency efforts are (1) the clearinghouse and (2) the intergovernmental training councils.

The Clearinghouse

Clearinghouse activities are designed to promote the sharing of resources. One such activity is the development and maintenance of training resource information systems. These systems make known to Federal trainers new methods, techniques, and the availability of resources on a timely basis.

For example, newly developed audio-visual resources are made available to other trainers on a preview or loan basis. Managerial and supervisory course modules, fully documented, are also available for loan from the Commission. Referrals to other original sources of information are also made.

Activity in this area is receiving increased emphasis. It is expected that, as inventories and inquiries grow, trainers and employee development specialists will have the best available access to information resources.

The Intergovernmental Training Councils

The extensive nationwide network of intergovernmental training councils developed through Commission initiative provides an invaluable forum for information exchange. To a large extent the councils determine the need for and the acceptability of training services. The councils screen services and products so that those that find their way into the Federal training community are more valid and usable.

These councils, which have overall goals of improving information exchange and increasing trainer competencies, are active in over forty locations throughout the country. Membership consists mainly of Federal employees from a variety of backgrounds such as: trainers, personnel generalists, administrative officers, operating supervisors, and State and local officials. Most councils have an intergovernmental mix.

The operation of intergovernmental councils is generally under the direction of an elected slate of officers or through affiliation with the local Federal Executive Board. This has been an effective formula for determining local needs and for maintaining a high level of participant interest.

The councils provide for:

- the sharing (or borrowing) of training materials, courses, or equipment; and
- the pooling of training efforts in areas of limited Federal employment.

Professional development in training skills, knowledges, and abilities has proven to be a strong motivating factor for the continued growth of these councils.

Increased Effectiveness of Trainers

The Commission's goal is to bring all trainers in the Federal service to full competence in the roles required to perform the missions of their organizations.

Preceding paragraphs under the section "Improved Training Management" discussed efforts which indirectly increase the proficiency of trainers. A direct effort to enhance their proficiency began with the issuance of Commission Bulletin 410-85 (July 31, 1975). In effect, the Commission committed to: "the identification and development of alternative delivery systems designed to develop trainers and employee development practitioners to their highest level of proficiency."

An outcome of that commitment was **The Employee Development Specialist Curriculum Plan** (November, 1976). The curriculum plan proposes a competency-based curriculum that emphasizes the specific knowledge, ability, and understanding requirements of the tasks which constitute the job of the trainer. These tasks are divided among the five roles of the employee development specialist: Career Counselor, Consultant, Learning Specialist, Program Manager, and Training Administrator.

The implementation process has begun. For example, as a result of extensive surveys, workshops, and conferences (nationally and internationally), Career Counselor—the newest of the identified roles—has been developed into the training course **Counseling and Interviewing for Trainers.**

Career counseling is a subset of career planning which is discussed under the following topic.

Improved Career Planning for Public Service Employees

The Commission encourages the establishment of career planning within agencies. Effective career planning involves a systematic approach to recruiting, selecting, and developing employees to fill expected staffing needs. One of the keys to successful career planning is proper identification of the tasks for which training is required.

Occupational analysis, long in use by the military departments to plan career training for enlisted personnel, is now being introduced by the Commission and some other agencies to provide the essential information base for coherent, career-long development patterns for Federal civilian employees. The introduction of occupational analysis has been attended by very favorable economic results.

Government-Wide Training Data, FY 1977

Chart 2: Training Summary

For training of 120 days and less Item	Government-wide	General Schedule*	PL-313 and Other Executives	Wage System	Other Pay Systems	Unspecified
1. Population Covered[1]	2,102,569	1,482,394	11,927	419,682	182,492	5,507
2. Training Occurrences	882,346	760,591	3,100	77,723	40,390	542
3. Occurrences Compared With Population Size (in percent)	41.97	51.29	25.99	18.52	22.13	9.84
4. Number of Individuals Trained	554,803	471,420	1,966	55,948	25,120	349
5. Percent of Population Attending Training	26.39	31.79	16.48	13.33	13.76	6.34
6. Hours of Training	36,376,391	31,217,252	109,349	2,785,616	2,239,146	25,028
7. Cost of Training[2]	156,601,263	145,891,568	775,326	6,489,088	3,354,087	91,194
8. Average Cost per Training Hour	4.31	4.67	7.09	2.33	1.50	3.64
9. Average Cost per Training Occurrence	177.48	191.81	250.11	83.49	83.04	168.25
10. Average Length, in hours, of Training Occurrences	41.23	41.04	35.27	35.84	55.44	46.18
11. Percent of Population	100.00	70.53	0.57	19.96	8.68	0.26
12. Percent of Training Occurrences	100.00	86.20	0.35	8.81	4.58	0.06
13. Percent of Training Hours	100.00	85.82	0.30	7.66	6.16	0.07
14. Percent of Training Cost	100.00	93.16	0.50	4.14	2.14	0.06
15. Percent of Duty-Time Hours Spent in Training	0.75	0.90	0.41	0.30	0.56	0.17

[1] Approximately 800,000 Federal civilian employees and all of the uniformed military are excluded by law and regulation from reporting training to the U.S. Civil Service Commission. The largest group excluded is the U.S. Postal Service.

[2] The costs on this table **exclude** the salaries of training participants and the salaries of agency training staff personnel engaged in the conduct of training. Additionally, the costs of facilities, such as classrooms, housing facilities, and other plant costs associated with the conduct of training are also **excluded.**

*Includes GS-1 to GS-18 employees.

Section 2

2. Interagency Training Centers

A means of reducing cost and improving the effectiveness of training to meet common needs is provided through interagency training. Section 410.101(c) of the Commission's regulations states: " 'Interagency training' means training provided by one agency for other agencies or shared by two or more agencies." The Civil Service Commission requires agencies to assign their employees to available interagency training when this would result in better training, improved service, or savings to the Government.

The Commission promotes interagency and intergovernmental cooperation to identify and meet common training needs by assuming an active leadership role in making such cooperation a reality. Interagency training centers give strong emphasis to this reality.

Central to the operation of these centers is their concentration in some particular specialty or subject matter area. The following centers have been selected for commentary:

- the Federal Law Enforcement Training Center,
- the Interagency Auditor Training Center,
- the Foreign Service Institute,
- the Federal Acquisition Institute, and
- the Occupational Safety and Health Administration Training Institute.

The above training centers were founded upon the "lead agency" concept, that is, the agency with major program responsibility serves as the lead agency with other agencies participating and cooperating.

These centers are discussed in the following paragraphs.

Federal Law Enforcement Training Center

The need for an interagency training facility for those who are charged with enforcing Federal laws became apparent in the late 1960's. An interagency study showed that although quality training for law enforcement officers was essential, such training was not available to most Federal officers because adequate training facilities were nonexistent, except for those used by the Federal Bureau of Investigation (FBI).

As a result, Treasury Department Order No. 217, dated March 2, 1970, established the Federal Law Enforcement Training Center as an entity within the Department of the Treasury. Later that year, the heads of agencies entered into a "Memorandum of Understanding for the Sponsorship and Operation of the Consolidated Federal Law Enforcement Training Center." The "Memorandum," as amended in 1977, created a Board of Directors that has the final authority in matters of training policy, training programs, training criteria, and training standards of the Center. The Board consists of representatives from Interior, Justice, Treasury, the General Services Administration, the Office of Management and Budget, the Civil Service

Commission, the U.S. Capitol Police Board, and other participating agencies.

The training facilities, an entire 1500-acre campus, are in Glynco, Georgia, and consist of classrooms, dormitories, recreation facilities, and a dining room. (The facilities were moved to Glynco in 1975). The Center has three divisions through which common basic training is furnished to the recruits of the participating agencies and, when space is available, to the recruits of other agencies.

The Criminal Investigator Training Division is a 7-week program that includes training in criminalistics, communications, investigative techniques, and the law. During FY 77, 19 basic classes were conducted and 863 students were graduated, a 10 percent increase in graduates over FY 76.

The Police Training Division is a series of programs of varying lengths that are designed for uniformed Federal law enforcement officers. In FY 77, the Division conducted 41 classes and graduated 1,281 students, compared to FY 76, a 70 percent increase in the number of classes and a 62 percent increase in the number of students graduated. Four new major programs were established: a 2-week National Park Service course; a 4-week Capitol Police refresher course; a 14-week immigration officers basic training course and a 16-week border patrol course.

The Special Training Division provided extensive training in firearms, self-defense, and arrest techniques. Facilities include outdoor firing ranges, an improved high-speed driving course, a rough-terrain four-wheel drive course, two vehicle skid-control areas, an outdoor physical training obstacle course, showers, and locker rooms. In FY 77, 45% more students participated in this Division's training than in FY 76.

Various curricula of the Federal Law Enforcement Training Center provide each recruit with the specific knowledges and skills necessary for on-the-job performance. Each student receives extensive classroom training and undergoes an intensive series of practical exercises designed to test the student's reactions to situations and problems that must be faced on the job.

Interagency Auditor Training Center

The Interagency Auditor Training Center is the only Federal facility that is devoted entirely to conducting interagency training oriented to the specific and unique needs of Government auditors. Its mission is to make available to all Federal, State and local government auditors a comprehensive audit training program. The program is particularly useful to trainees who come from audit offices that lack either a training program or in-house training facilities.

The Center was conceived of at a meeting in 1967 at which representatives of several smaller audit agencies agreed that it is difficult for a small agency to command the resources necessary to meet the training needs of auditors. The representatives proposed that the agencies join forces to develop and institute a centralized training program that would accommodate the training needs of the auditors in

all of the participating organizations. The U.S. Civil Service Commission approved the objectives of the Center on May 13, 1968. The Center was also given the authority to extend its training opportunities to State and local government auditors.

In January 1978, the agreement to operate the Interagency Auditor Training Center was revised. Among other changes, a Board of Directors was created so that Federal, State and local audit communities could have a major voice in determining the Center's policies and programs. The Board includes members from a variety of Federal agencies and from State and local governments.

The Center is organizationally located in the Office of the Assistant Secretary for Administration, Department of Commerce. It is open to all Federal, State and local government auditors and to students from foreign governments. Its courses are designed to provide participants with a means of improving or developing auditing skills which, when applied on the job, will increase job satisfaction and contribute to a more efficient and effective use of Government resources. The FY 77 curriculum encompassed 24 courses that ranged in subject matter from "Auditing Systems Supported by ADP Equipment" to "Effective Governmental Auditing."

The training facilities include a fully equipped classroom, a student lounge, and administrative offices. They are in Bethesda, Maryland, a suburb of Washington, D.C. Although the Center does not have residential facilities, it will help out-of-town students with their hotel reservations. To reduce the cost of training out-of-town students, the Center has made all of the courses listed in its catalog available for onsite presentation. Most of the courses run from 2 to 5 days.

During FY 77, the Center presented its 24 courses 98 times. Fifty-eight courses were conducted in 22 cities outside the headquarters' metropolitan area. Student enrollment totaled 2,154. The students came primarily from Federal agencies.

Foreign Service Institute

Although the Foreign Service Institute (FSI) was not formally established until 1947, its roots reach back to at least 1907, when seven newly appointed consuls were assigned to the Department of State for a 30-day course of instruction. Part of the Department of State, the Foreign Service Institute is, according to its enabling legislation, "to furnish training and instruction to...officers and employees of the Government for whom training and instruction in the field of foreign relations is necessary." The legislation goes on to say that the Institute may also give training to the members of the families of officers and Government employees who are or will be abroad.

The Institute has major branches in Taiwan, Japan, and Tunisia; its headquarters, however, are in Rosslyn, Virginia. The Institute's facilities accept about 15,000 course enrollments annually—about half in this country, the rest abroad—in full-time, part-time, and extension programs.

Employees of the Department of State constitute about 50 percent of the enrollment. The balance is made up of employees of some 27 other departments and independent agencies—chiefly the Agency for International Development, the International Communication Agency and the Department of Defense.

A variety of programs are offered through the Institute. The Senior Seminar in Foreign Policy is the Government's most advanced program of study for senior officers involved in foreign affairs. Applicants are carefully screened, and only about 27 are accepted each year. The Foreign Affairs Executive Seminar, a 3-week course, provides advanced short-term instruction on United States foreign policy to senior foreign affairs executives. The Diplomat-in-Residence Program is for senior foreign service officers who are sent to American universities so that the academic community can draw on the officers' practical experience.

The School of Professional Studies provides foreign affairs officers with career training and provides their spouses with a suitable orientation to the countries to which they are being sent. The School of Language Studies, perhaps the best known part of the Foreign Service Institute, teaches foreign languages. Intensive instruction is offered in Washington, D.C., and at branch schools in Japan, Taiwan, and the Arab world. Part-time instruction is available at some 200 overseas posts in about 60 languages. The Center for Area and Country Studies offers programs that are designed to give foreign affairs officers knowledge of and an appreciation for the people and institutions of the countries with which they may be dealing.

In FY 77, course enrollments totaled 16,124, of which about 9,000 were in Washington and about 5,000 overseas. The FSI also developed several new programs such as the following: "Human Rights" explores the impact of the recent human rights legislation on American foreign relations. The "Ambassadorial Seminar," first held for President Carter's new envoys and their spouses, is a series of discussions on such subjects as terrorism, communications with Washington, and the authorities and responsibilities of ambassadors.

Federal Acquisition Institute

The Federal Acquisition Institute (FAI), then called the Federal Procurement Institute, was established in July 1976 by the Administrator of the Office of Federal Procurement Policy. It was organized according to the provisions in the Memorandum of Understanding, a document signed in May 1976 by 16 Federal agencies and departments that have acquisition responsibilities. It operates through a permanent staff and the Department of Defense serves as the executive agency for the institute.

Unlike the other interagency training centers discussed in this section, the FAI is not a place and it is not a building. It is people—people who are employed throughout the Government but are organized into components that form a coordinating system of structured cooperation.

The FAI is the focal point for coordinating the Government-wide planning, development, implementation, and evaluation of programs in the areas of procurement research, education and training, and career development. Its mission is to provide leadership in improving the quality, efficiency, and performance of procurement personnel. To do so, it promotes the development of academic programs, promotes and monitors research to find better acquisition methods and techniques, devises standards by which programs can be measured and evaluated, reviews programs to make sure that they are current and do not duplicate each other, encourages Government-wide career development programs, and maintains a system of communication that allows new issues and needs in the procurement community to be identified.

Occupational Safety and Health Administration Training Institute

The Occupational Safety and Health Administration Training Institute (OSHA), part of the Department of Labor, was established in 1972. Its primary function is to provide instruction to people who are professionally involved with occupational safety and health problems. Although many of the trainees are OSHA employees, some come from other Federal agencies and from State and local governments. The Institute also accepts trainees from the private sector—industry, business, and commerce.

A wide range of courses is offered: there is one on radiological health hazards and one on hazardous materials and compressed gases. There is a course for industrial hygienists and one for instructors of personnel in the construction industry. Company and union representatives can take a course in OSHA safety and health fundamentals; union and management representatives from the construction industry can take a one-week course on the OSHA regulations that are pertinent to builders.

The training facilities were moved from Rosemont to Des Plaines, Illinois, in late 1977. The new facilities, enclosing 35 thousand square feet, include eight classrooms, a cafeteria, a library, and an audio-visual studio, which allows the Institute to make training tapes. The building also has demonstration laboratories, making it easier for students to understand how OSHA regulations apply to power presses, welding equipment, and other kinds of machines. Industrial health hazards can be simulated in some of the laboratories, giving students "hands-on" experience with such operations as sampling for dust.

In FY 77, the Institute gave 23 different courses which were attended by a total of 3,694 trainees. Four hundred and fifty-nine came from the private sector, 1,989 were OSHA employees, 499 were from other Federal agencies, and 747 were employees of State governments.

Other Agency Involvement

Interagency training is not limited to the interagency

training centers discussed in the previous paragraphs. It also involves the following agencies:

- the Defense Civil Preparedness Agency
- the National Archives and Records Service,
- the Army Management Engineering Training Activity, and
- the Civil Service Commission.

Interagency training centers accounted for nearly 99 percent of all interagency training. All told, 131,334 training occurrences were accomplished through interagency training in FY 1977.

Section 3

3. Government-Wide Training Effort

Expenditures by Source

During FY 1977, training expenditures were $2[illegible]5,941,055. Of this amount, approximately 37.7% went for the salaries of agency training staff assigned to conduct training and development of employees. The remaining 62.3% was expended for non-salary items: tuition, travel and per diem, contracted services, and other related items.

The Government-wide average cost per training occurrence was $291, and the average cost per hour was $6.86.

Comparison Among Sources

Government Sources of Training

Government sources continued to be the major providers of training to Federal employees.

In-house training used significantly greater resources than any other source.

But interagency training remained overall the least costly available source.

In-House Training. Reported training costs for this source totaled 179.9 million dollars in FY 1977. Generally, internal accounting systems do not accommodate training costs. Therefore, the Commission believes that these costs are, to a large extent, varied and understated. Unfortunately, the extent to which these costs are understated cannot be determined.

Interagency Training. In FY 1977, expenditures for interagency training amounted to 25.4 million dollars. This is the least expensive among the major sources of training available to the Federal agencies. Cost savings occur because interagency training facilities are established to achieve the economies that result from use of shared resources. Cooperative efforts to make training courses and facilities available to other departments and agencies are among the provisions of the Government Employees Training Act. Some Federal sources of interagency training are: (1) the Interagency Auditor Training Center, (2) the Federal Law Enforcement Center, (3) the Foreign Service Institute, and (4) the Civil Service Commission.

Non-Government Training (for training of 120 days and less)

Non-Government training (short-term) reflected expenditures of 48.2 million dollars in FY 1977. (See Chart 4, pg. 25). These costs were distributed among three parts that comprise non-Government training: (1) from courses especially developed for the agency, (2) from standard cataloged courses, and (3) from courses provided by State and local governments.

The following paragraphs discuss some cost characteristics of these three parts.

From Courses Specially Developed. Expenditures amounted to 7 million dollars for specially developed courses. Hourly costs in this area have started to show a decline in recent years. Evidence suggests two reasons for this decline: (1) stringency in the market place and (2) hard contract bargaining by agency officials.

On the other hand, the volume of training within this area has remained at a relatively constant low level.

From Standard Cataloged Courses. Total expenditures for this source of training amounted to 40.6 million dollars in FY 1977. Training received through standard educational experiences is the most costly among the non-Governmental sources (short-term). It also ranks second to in-house training in both volume and cost per hour of training received.

Cost bases for pricing and selling these courses are approximately the same as those employed by managers of interagency facilities.

From State and Local Governments. Approximately 0.6 million dollars were spent through this source of training. Training volume for this source is the lowest among all the sources. Other characteristics are: (1) least number of hours spent in courses, and (2) lowest cost per hour. The low dollar values are in large part attributable to the prevailing pay scales within the various State and local government areas.

Non-Government Training (for training of more than 120 days)

Non-Government training (long-term) cost approximately 3.4 million dollars in FY 1977. This is perhaps the most expensive source of training. However, the hourly rate of $3.11 reflected in Chart 4 would tend to indicate that long-term training is the least costly. This is not the case. Cost per hour of training is determined by the total number of hours that employees are in a training status, rather than by the number of hours they are in a classroom.

For example, if the employees who attended long-term training had 9, 12, or 15 hours of actual recitation per week for the time they were there, the hourly rates would then be in excess of $13, $10, and $8, respectively, based on a 40-hour work week. The hourly rates contained in Chart 4 were determined by using the total number of hours while in training status.

The Commission does not require agencies to report the total hours of actual classroom participation. Therefore, a more precise hourly rate for long-term training cannot be determined.

Expenditures by Source

Chart 3: Where the Training Dollar Went, FY 1977

Expenditures by Source

Chart 4: Comparison Among Sources of Training, 1977

Source	Training Occurrences	Expenditures (In Dollars)	Hours of Training	Average Cost per Training Hour (In Dollars)	Average Cost per Training Occurrence (In Dollars)	Average Length of Training Occurrences (In Hours)
TOTAL ALL SOURCES	883,087	256,941,055	37,464,999	6.86	290.96	42.43
Training of 120 Days and Less (Short-Term)	882,346	253,550,254	36,376,391	6.97	287.36	41.23
Government	665,925	205,300,294	29,021,407	7.07	308.29	43.58
In-house[1]	534,591	179,914,957	24,720,241	7.28	336.55	46.24
Interagency	131,334	25,385,337	4,301,166	5.90	193.29	32.75
Non-Government (Short-Term)	216,272	48,224,934	7,348,255	6.56	222.98	33.98
Specially Developed	42,248	6,994,283	1,301,971	5.37	165.55	30.82
Standard Cataloged Courses	168,151	40,575,059	5,892,480	6.89	241.30	35.04
From State and Local Governments	5,873	655,592	153,804	4.26	111.63	26.19
Source Not Specified	149	25,126	6,729	3.73	168.63	45.16
Non-Government Training of More Than 120 Days (Long-Term)	741	3,390,801	1,088,608	3.11	4,575.98	1,469.11

[1] The expenditures for in-house training include the salaries of full-time instructors and the salaries of all part-time personnel who engaged in agency training activities during FY 1977. The cost of facilities is not included.

Trends in Training

Total training costs in FY 1977 increased by approximately 8 percent over FY 1976. The average length, in hours, of training occurrences dropped from 43 hours per occurrence in FY 1976 to 42 hours per occurrence in FY 1977. Total training volume also declined, down by nearly 75 thousand occurrences.

Federal agencies reported the above items as shown in Charts 5 thru 9.

Training Costs

Reported expenditures for training in FY 1977 were 256.9 million dollars, an increase of about 8 percent over FY 1976. A goodly portion of the increase resulted from continued growth in the size of the instructor corps. In FY 1976, there were 2,744 full-time instructors. The numbers went to 3,335 in FY 1977, an increase of approximately 22 percent. The increase in salary costs associated with the training staff was about 9 million dollars, a 16 percent increase.

Part-time personnel also increased, up from 1,807 staff years in FY 1976 to 2,004 staff years in FY 1977, an increase in the vicinity of 11 percent. Salary costs for part-time personnel increased from 29.0 million dollars in FY 1976 to 30.1 million dollars in FY 1977, an increase of 4 percent.

Training Hours

Hours of training continued to decline, down from 41.3 million in FY 1976 to 37.5 million in FY 1977.

Training Occurrences

The volume of training appears to have dropped by 75 thousand occurrences. This decline was mainly confined to three agencies, all of which use large amounts of training. These are the Departments of the Air Force, the Navy and the Interior. An analysis of the agency declines appears in Section 4.

Training shortfalls within these agencies were significant, but increases within other agencies prevented a greater decline in the volume of training.

Trends in Training

Cost and Hours

In-house ..... Interagency — — Non-Government short-term

Chart 5: Cost of Training* (in millions of dollars)

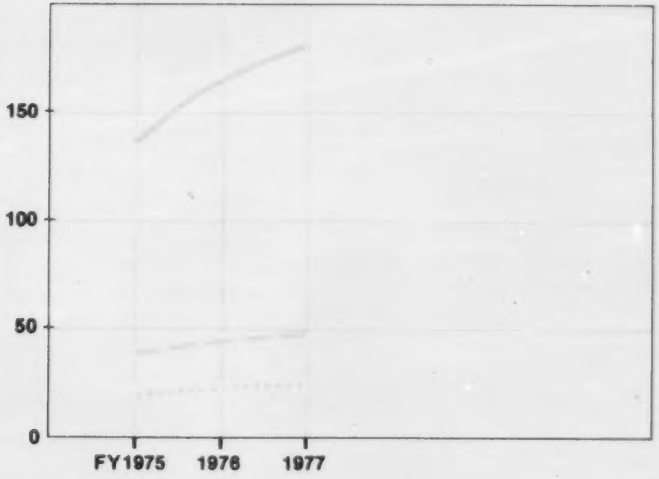
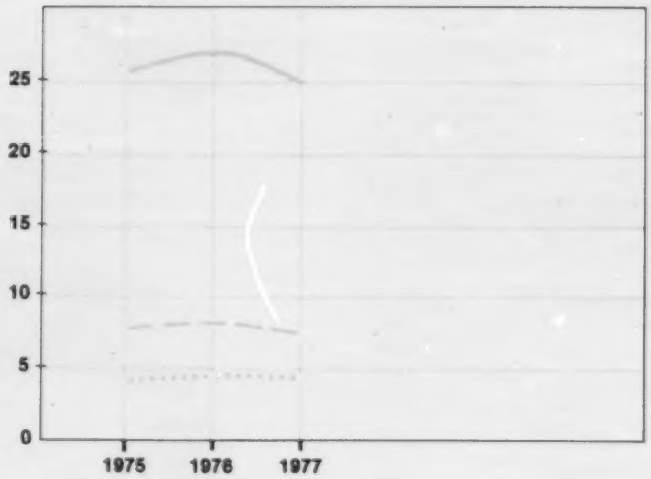


Chart 6: Hours of Training (in millions)



*Salary costs of agency training staffs included.

Note: Non-Government long-term training accounted for 3.4 million dollars and 1.1 million hours in FY 1977. It fell from 1.2 percent of the total training occurrences in FY 1975 to less than 1 percent in FY 1977.

Trends in Training

Chart 7: Average Length, in hours, of Training Occurrences

Source	FY 1975	FY 1976	FY 1977	% Change 75-76	% Change 76-77
TOTAL ALL SOURCES	45.13	43.14	42.43	—4.4	—1.6
Training of 120 Days and Less (Short-Term)	43.45	41.67	41.23	—4.1	—1.1
Government	44.89	43.14	43.58	—3.9	1.0
In-house	46.44	44.38	46.24	—4.4	4.2
Interagency	36.96	36.85	32.75	—0.3	—11.1
Non-Government (Short-Term)	38.67	36.85	33.98	—4.7	—7.8
Specially Developed	34.36	33.38	30.82	—2.9	—7.7
Standard Cataloged Courses	39.81	37.80	35.04	—4.3	—7.3
From State and Local Governments	49.39	32.88	26.19	—33.4	—20.3
Source Not Specified	42.27	50.46	45.16	19.4	—10.5
Non-Government Training of More Than 120 Days (Long-Term)	1431.02	1486.58	1469.11	3.9	—1.2

Trends in Training

Chart 8: Average Cost per Training Hour

Source	FY 1975	FY 1976	FY 1977	% Change 75-76	% Change 76-77
TOTAL ALL SOURCES	5.11	5.75	6.86	12.5	19.3
Training of 120 Days and Less (Short-Term)	5.21	5.84	6.97	12.1	19.4
Government	5.26	5.95	7.07	13.1	18.8
In-house	5.32	6.10	7.28	14.7	19.3
Interagency	4.90	5.05	5.90	3.1	16.8
Non-Government (Short-Term)	5.01	5.44	6.56	8.6	20.6
Specially Developed	4.15	4.73	5.37	14.0	13.5
Standard Cataloged Courses	5.22	5.64	6.89	8.0	22.2
From State and Local Governments	4.60	3.12	4.26	—32.2	36.5
Source Not Specified	6.50	3.24	3.73	—50.2	15.1
Non-Government Training of More Than 120 Days (Long-Term)	2.65	3.03	3.11	14.3	2.6

Trends in Training

Chart 9: Average Cost Per Training Occurrence

Source	FY 1975	FY 1976	FY 1977	% Change 75-76	% Change 76-77
TOTAL ALL SOURCES	230.57	247.84	290.96	7.5	17.4
Training of 120 Days and Less (Short-Term)	226.25	243.52	287.36	7.6	18.0
Government	236.10	256.75	308.29	8.7	20.1
In-house[1]	246.84	270.71	336.55	9.7	24.3
Interagency	180.92	185.93	193.29	2.8	4.0
Non-Government (Short-Term)	193.54	200.34	222.98	3.5	11.3
Specially Developed	142.63	157.93	165.55	10.7	4.8
Standard Cataloged Courses	206.38	213.33	241.30	3.4	13.1
From State and Local Governments	227.09	102.55	111.63	—54.8	8.9
Source Not Specified	274.75	163.28	168.63	—40.6	3.3
Non-Government Training of More Than 120 Days (Long-Term)	3792.30	4505.93	4575.98	18.8	1.6

[1] The expenditures for in-house training include the salaries of full-time instructors and the salaries of all part-time personnel who engaged in agency training activities during FY 1977. The cost of facilities is not included.

Areas of Training Emphasis

The primary purpose for the training of Federal employees is the improvement of the employees' performance in their present positions. Approximately half of the training in FY 1977 was reported to have been given for this purpose. This is in accord with the intent of the Government Employees Training Act, which authorizes this training, and declares it to be the policy of the Congress to "...provide means for the development of maximum proficiency in the performance of official duties by employees."

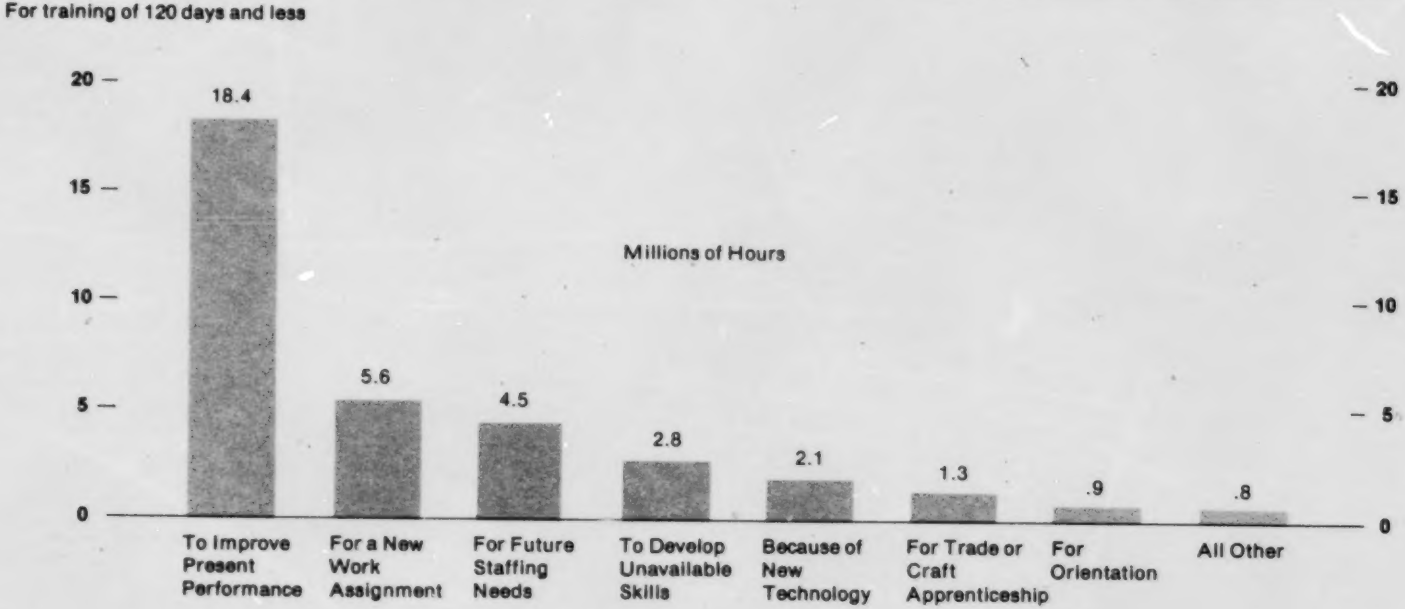
Nearly 15% of the training hours in FY 1977 occurred as a result of new work assignments for the employees. Planning for future staffing needs and developing skills which are not available from outside the Government also led to another 20% of the training effort.

Federal training is concentrated most heavily in specialty and technical subject matter areas. About 40% of the training effort was in fields such as taxes, air traffic control, law enforcement, and other specialty training. Sizable portions of training time were also spent to develop employee skills, knowledges, and abilities in administration and analysis; in legal, medical, scientific, and engineering subjects, and in the clerical area.

Executive and management training ranks seventh among subject matter in terms of the number of hours spent in training, but is given a very heavy money emphasis. This subject matter cost $7.44 per hour, compared to a general Government-wide average of $4.31. Neither cost includes training staff salaries or costs for training facilities, etc. These figures are for training of 120 days and less.

Areas of Training Emphasis

Chart 10: Purpose for Training, FY 1977



Areas of Training Emphasis

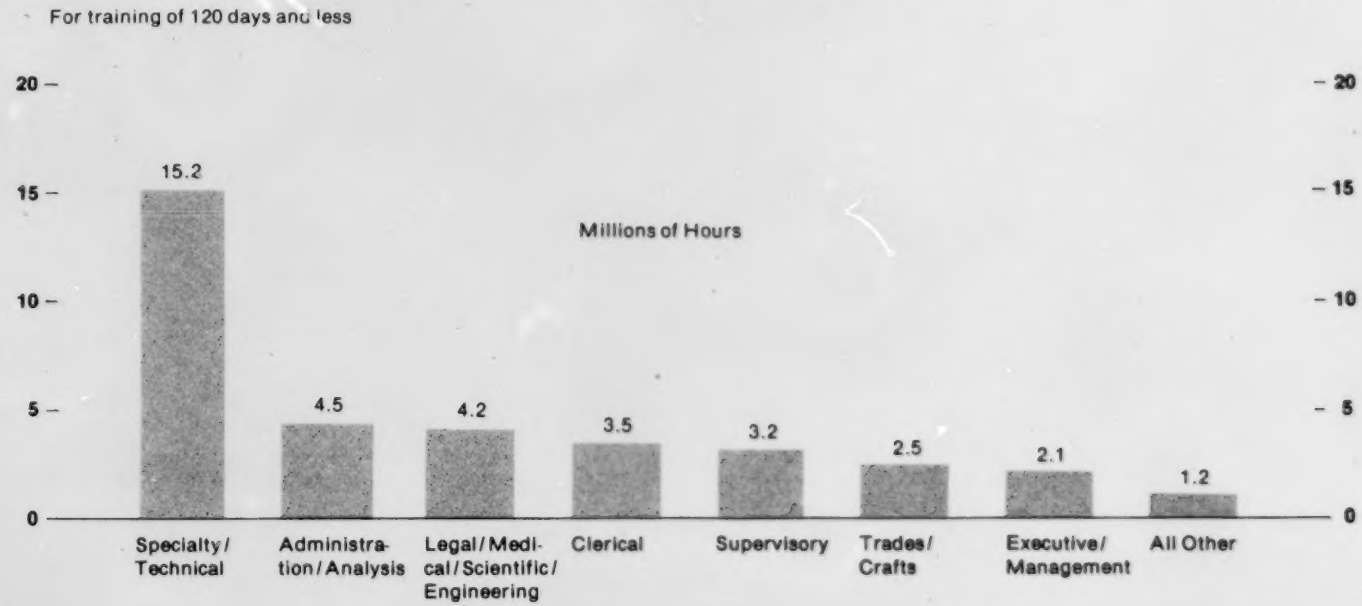
Chart 11: Purpose for Training, FY 1977

For training of 120 days and less

	Hours of Training	Cost of Training (In Dollars)	Training Occurrences	Average Length of Training Occurrences (In Hours)	Average Cost per Training Hour (In Dollars)
ALL PURPOSES	36,376,391	156,601,263	882,346	41.23	4.31
To Improve Present Performance	18,383,986	88,433,764	563,266	32.64	4.81
For a New Work Assignment	5,563,455	16,372,197	65,538	84.89	2.94
For Future Staffing Needs	4,558,906	14,248,816	84,608	53.88	3.13
To Develop Unavailable Skills	2,811,534	19,433,067	35,765	78.61	6.91
Because of New Technology	2,073,570	12,252,887	61,222	33.87	5.91
For Trade or Craft Apprenticeship	1,341,017	508,709	8,011	167.40	0.38
For Orientation	852,665	1,815,533	36,910	23.10	2.13
Because of Program or Mission Change	629,746	3,271,364	23,182	27.17	5.19
For Adult Basic Education	160,972	261,475	3,834	41.99	1.62
Purpose Not Specified	540	3,451	10	54.00	6.39

Areas of Training Emphasis

Chart 12: Principal Subject Matter, FY 1977



Areas of Training Emphasis

Chart 13: Principal Subject Matter, FY 1977

For training of 120 days and less	Hours of Training	Cost of Training (In Dollars)	Training Occurrences	Average Length of Training Occurrences (In Hours)	Average Cost per Training Hour (In Dollars)
ALL SUBJECTS	36,376,391	156,601,263	882,346	41.23	4.31
Specialty/Technical	15,151,216	68,714,006	290,135	52.22	4.54
Administration/Analysis	4,469,873	22,293,001	151,503	29.50	4.99
Legal/Medical/Scientific/Engineering	4,202,515	25,178,267	116,615	36.04	5.99
Clerical	3,521,707	8,293,427	79,808	44.13	2.35
Supervisory	3,173,958	9,655,433	108,125	29.35	3.04
Trades/Crafts	2,523,367	3,625,083	35,504	71.07	1.44
Executive/Management	2,157,187	16,055,870	56,240	38.36	7.44
Orientation	720,636	1,729,843	29,655	24.30	2.40
Adult Basic Education	345,492	777,776	10,841	31.87	2.25
Subject Matter Not Specified	110,440	278,557	3,920	28.17	2.52

Distribution of Training

The following pages present data on the distribution of training among various employee groups. This presentation permits comparisons of the training provided to men and to women, to minority groups, and to various levels within pay systems and pay plans.

Careful consideration must be given to prevailing conditions within agencies before attempting to draw inferences. The fact that one group of employees may have received more training than another may be completely justified by the needs of both the organization and the respective employees. However, areas for managerial concern and attention may arise when the information presented here is interpreted within the context of the manager's organization location.

Indicators of Training Distribution

This section uses three indicators of training distribution:

- Percent of Duty-Time Hours Spent in Training (called the Duration Ratio in previous reports)—Chart 14,
- Index of Training Equity—Chart 15, and
- Non-Salary Cost by Pay System—Chart 16.

Distribution of Training

Chart 14: Percent of Duty-Time Hours Spent in Training, FY 1977

For training of 120 days and less

Minority Group Designation	Percent		
	Total	Men	Women
TOTAL ALL GROUPS	0.75	0.81	0.62
Total Minority	0.60	0.59	0.61
Black	0.57	0.52	0.62
Spanish Surnamed	0.69	0.73	0.59
American Indian	0.51	0.48	0.55
Oriental	0.76	0.82	0.63
Minority Not Specified	0.72	0.77	0.56
Non-Minority	0.79	0.87	0.63

Pay System	Percent		
	Total	Men	Women
TOTAL ALL PAY SYSTEMS	0.75	0.81	0.62
Total General Schedule or Similar	0.90	1.06	0.69
GS-1 Thru 4	0.47	0.55	0.44
GS-5 Thru 8	1.04	1.37	0.82
GS-9 Thru 12	1.09	1.11	1.01
GS-13 Thru 15	0.92	0.92	0.91
GS-16 Thru 18	0.66	0.65	0.66
PL-313 and Other Executives	0.41	0.38	0.09
Total Wage Systems	0.30	0.31	0.15
Regular Nonsupervisory	0.24	0.26	0.13
Regular Leader	0.31	0.31	0.26
Regular Supervisory	0.77	0.78	0.62
Other Pay Systems	0.56	0.73	0.29
Pay System Not Specified	0.17	0.22	0.08

Index of Training Equity

Nature of the Index

The Index of Training Equity, Chart 15 below, shows the relative amount of training received by different groups within the Federal work force. It compares the number of hours of training **per capita** for a population group with the number of training hours **per capita** for the entire reporting population. An Index value of 1.00 represents comparability with the Government population as a whole. As a measuring instrument, the Index can be used to gauge the effects of policy, practices, and procedures on the distribution of training. Because the Index values have been adjusted for the size of a group's population, they reflect the true proportionate share of time given to population groups.

Interpretation of Index Values

An Index value of 1.00 indicates that a group of employees is being given a comparable amount of training time to that which is given Federal employees in general. An Index value significantly greater than 1.00 indicates a heavier concentration of training time for a group, whereas an Index value of less than 1.00 means that these employees, as a group, receive some fraction of the average training time that is given over the Government as a whole.

Although some variation is to be expected among various population groups, it takes tremendous differences in the amount of training hours received to cause a significant deviation of the Index from 1.00 for the larger segments of the employee population. For example, the Index shows the proportion of training given to General Schedule (GS) employees in the grade level 5-8 to be more than double that given GS grades 1-4. It would require an additional **4,600,000** hours of training for grades GS 1-4 to raise their training volume, which corresponds to an Index value of 0.64, to a level comparable with the GS grades 5-8, which have an Index value of 1.39.

Clearly, the difference in the amounts of training provided to the above employee groups are significant.

Causes of Training Distribution

The Index shows the results of training actions, which in turn manifest the results of many different causes and reasons, among which are:

- personnel classifications,
- work force training needs,
- shifts in policy emphasis,
- fluctuations in the job market, and
- other factors.

A statistical report does not provide the sort of information required to isolate which of the possible underlying reasons are responsible for the differences which have

been observed. The user of this report can readily identify some portions of the work force which might require greater training emphasis because of the complex or critical nature of their duties, high turnover among employees, changes in policy or technology, and many other matters. Likewise, the reader might recognize groups of employees who are less likely to require frequent training to uphold their job responsibilities. However, where such logical explanations for discrepancies are not available, a careful review by agency management would be appropriate.

Distribution of Training

Chart 15: Index of Training Equity, FY 1977

For training of 120 days and less

Minority Group Designation	Percent		
	Total	Men	Women
TOTAL ALL GROUPS	1.00	1.08	0.86
Total Minority	0.81	0.78	0.84
Black	0.78	0.69	0.86
Spanish Surnamed	0.91	0.95	0.80
American Indian	0.68	0.64	0.74
Oriental	1.02	1.12	0.85
Minority Not Specified ...	0.94	1.00	0.75
Non-Minority	1.05	1.14	0.87

Pay System	Percent		
	Total	Men	Women
TOTAL ALL PAY SYSTEMS.	1.00	1.08	0.86
Total General Schedule or Similar	1.22	1.42	0.95
GS-1 Thru 4	0.64	0.72	0.61
GS-5 Thru 8	1.39	1.78	1.14
GS-9 Thru 12	1.48	1.50	1.40
GS-13 Thru 15	1.22	1.22	1.24
GS-16 Thru 18	0.85	0.85	0.82
PL-313 and Other Executives	0.53	0.49	0.12
Total Wage Systems	0.38	0.40	0.20
Regular Nonsupervisory ..	0.32	0.33	0.18
Regular Leader	0.39	0.39	0.34
Regular Supervisory	0.98	0.99	0.77
Other Pay Systems	0.71	0.93	0.38
Pay System Not Specified ..	0.26	0.33	0.14

[1] Formula for Index— $\frac{P \times h}{D \times m}$ where: P = the number of Federal employees; h = the duration, in hours, of the training for the group; D = the total duration, in hours, of Federal training; and m = the population of the group.

Distribution of Training

Chart 16: Non-Salary Cost by Pay System, FY 1977

For training of 120 days and less Pay System	Average Cost per Training Hour (In Dollars)			Average Cost per Training Occurrence (In Dollars)		
	Total	Men	Women	Total	Men	Women
TOTAL ALL PAY SYSTEMS	4.31	4.96	2.86	177.48	214.14	106.85
Total General Schedule or Similar	4.67	5.57	2.93	191.81	238.51	111.43
GS-1 Thru 4	1.70	1.48	1.79	64.79	72.17	62.83
GS-5 Thru 8	3.29	3.62	2.94	160.46	213.20	121.83
GS-9 Thru 12	5.55	5.89	3.97	217.01	235.50	141.68
GS-13 Thru 15	8.53	8.66	6.38	290.36	296.44	199.78
GS-16 Thru 18	11.71	11.72	11.93	405.40	402.19	498.23
PL-313 and Other Executives	7.09	8.44	7.13	250.11	274.66	205.20
Total Wage Systems	2.33	2.39	0.97	83.49	85.92	33.52
Regular Nonsupervisory (WG)	2.32	2.40	0.85	95.74	99.83	30.70
Regular Leader (WL)	3.24	3.29	2.34	99.88	101.10	75.38
Regular Supervisory (WS)	2.24	2.26	1.31	58.61	59.10	37.31
Other Pay Systems	1.50	1.42	1.76	83.04	109.80	47.93
Pay System Not Specified	3.64	3.60	3.19	168.25	164.58	193.46

Section 4

4. Agency Training Efforts

Agency Abbreviations

Agency	*Abbreviation*
Action	**ACTION**
Agriculture, Department of	**AGRICULTURE**
Air Force, Department of	**AIR FORCE**
Army, Department of	**ARMY**
Atomic Energy Commission	**AEC**
Civil Service Commission	**CSC**
Commerce, Department of	**COMMERCE**
Defense Agencies, Other	**OTHER DEFENSE**
Energy Research and Development Administration	**ERDA**
Environmental Protection Agency	**EPA**
Equal Employment Opportunity Commission	**EEOC**
Federal Communications Commission	**FCC**
Federal Deposit Insurance Corporation	**FDIC**
Federal Energy Administration	**FEA**
Federal Trade Commission	**FTC**
General Accounting Office	**GAO**
General Services Administration	**GSA**
Government Printing Office	**GPO**
Health, Education and Welfare, Department of	**HEW**
Housing and Urban Development, Department of	**HUD**
Interior, Department of	**INTERIOR**

Justice, Department of	JUSTICE
Labor, Department of	LABOR
Library of Congress	LIBRARY OF CONGRESS
National Aeronautics and Space Administration	NASA
National Credit Union Administration	NCUA
Navy, Department of	NAVY
Nuclear Regulatory Commission	NRC
Panama Canal Company/Canal Zone Government	PANAMA CANAL
Securities and Exchange Commission	SEC
Selective Service System	SELECTIVE SERVICE
Small Business Administration	SBA
Smithsonian Institution	SMITHSONIAN
State, Department of/AID	STATE/AID
Transportation, Department of	TRANSPORTATION
Treasury, Department of	TREASURY
United States Information Agency	USIA
Veterans Administration	VA

Agency Training Efforts

Chart 17: Hours of Training

For training of 120 days and less	FY 75	FY 76	FY 77	% Change 75-76	% Change 76-77
TOTAL ALL AGENCIES	37,508,595	39,895,178	36,376,391	6.4	—8.8
Total Defense	15,575,866	17,401,745	13,399,128	11.7	—23.0
Air Force	4,161,960	4,665,194	2,901,439	12.1	—37.8
Army	4,887,870	6,022,971	5,314,294	23.2	—11.8
Navy	5,251,105	5,544,769	3,921,498	5.6	—29.3
Other Defense	1,274,931	1,168,811	1,261,897	—8.3	8.0
Total Non-Defense	21,932,729	22,493,433	22,977,263	2.6	2.2
Action	43,091	51,914	48,611	20.5	—6.4
AEC	65,544	*	*	—	—
Agriculture	2,283,009	2,468,799	2,587,051	8.1	4.8
Commerce	531,721	620,889	764,528	16.8	23.1
CSC	110,929	96,326	117,865	—13.2	22.4
EEOC	42,745	34,604	56,911	—19.1	64.5
EPA	563,006	451,393	150,120	—19.8	—66.7
ERDA	51,580	104,268	112,696	102.2	8.1
FCC	28,609	30,217	29,871	5.6	—1.1

FDIC	107,267	122,135	203,744	13.9	66.8
FEA	40,474	53,119	57,583	31.2	8.4
FTC	9,268	18,855	36,644	103.4	94.3
GAO	187,692	195,427	162,295	4.1	—17.0
GPO	62,931	33,942	40,655	—46.1	19.8
GSA	584,924	438,283	419,394	—25.1	—4.3
HEW	2,085,339	2,220,879	3,557,589	6.5	60.2
HUD	422,394	284,716	284,293	—32.6	0.0
Interior	2,397,078	2,345,713	1,026,946	—2.1	—56.2
Justice	1,354,140	1,784,713	1,753,552	31.8	—1.7
Labor	167,308	222,476	302,212	33.0	35.8
NASA	549,160	666,106	547,249	21.3	—17.8
NRC	*	40,646	38,978	—	—4.1
Panama Canal	109,954	84,237	76,639	—23.4	—9.0
SBA	66,364	64,120	48,052	—3.4	—25.1
SEC	28,420	10,749	21,150	—62.2	96.8
Smithsonian	38,025	35,244	29,954	—7.3	—15.0
Selective Service	18,989	6,314	224	—66.7	—96.5
State/AID	139,221	161,871	196,715	16.3	21.5
Transportation	3,395,903	3,508,773	3,777,630	3.3	7.7
Treasury	4,351,786	3,834,801	4,147,082	—11.9	8.1
VA	1,777,754	2,252,568	2,068,385	26.7	—8.2
All Other	318,103	249,426	312,645	—21.6	25.3

*Agency not in existence.

Agency Training Efforts

Chart 18: Non-Salary Costs of Training

For training of 120 days and less	FY 75	FY 76	FY 77	% Change 75-76	% Change 76-77
TOTAL ALL AGENCIES	124,857,274	147,522,469	156,601,263	18.2	6.2
Total Defense	32,959,219	43,809,537	42,606,820	32.9	—2.7
Air Force	8,073,829	10,941,742	7,717,098	35.5	—29.5
Army	12,815,844	18,509,605	21,222,381	44.4	14.7
Navy	8,815,676	11,333,466	9,597,411	28.6	—15.3
Other Defense	3,253,870	3,024,724	4,069,930	—7.0	34.6
Total Non-Defense	91,898,055	103,712,932	113,994,443	12.9	9.9
Action	124,836	122,878	137,503	—1.6	11.9
AEC	498,498	*	*	—	—
Agriculture	23,338,104	26,568,963	29,914,169	13.8	12.6
Commerce	2,243,359	2,689,050	3,047,207	19.9	13.3
CSC	379,721	341,514	463,961	—10.1	35.9
EEOC	185,340	131,722	363,992	—29.9	176.3
EPA	1,263,547	1,014,807	660,778	—19.7	—34.9
ERDA	253,721	623,912	809,819	145.9	29.8
FCC	126,351	130,535	140,140	3.3	7.4

FDIC	634,400	776,744	1,327,313	22.4	70.9
FEA	179,432	232,056	268,905	29.3	15.9
FTC	38,135	97,401	162,245	155.4	66.6
GAO	749,396	853,884	533,268	13.9	—37.5
GPO	96,811	122,522	112,115	26.6	—8.5
GSA	1,642,915	1,487,247	1,447,023	—9.5	—2.7
HEW	3,685,543	4,530,491	6,493,308	13.7	43.3
HUD	1,725,929	1,287,531	1,876,411	—25.4	45.7
Interior	6,100,989	6,447,157	4,281,596	5.7	—33.6
Justice	3,649,900	4,682,939	4,939,656	28.3	5.5
Labor	721,129	986,944	1,434,769	36.9	45.4
NASA	2,059,745	2,532,430	2,558,548	22.9	1.0
NRC	*	326,321	366,797	—	12.4
Panama Canal	212,738	125,412	138,378	—41.0	10.3
SBA	315,123	341,182	318,008	8.3	—6.8
SEC	43,569	43,084	115,576	—1.1	168.3
Smithsonian	115,435	106,907	95,573	—7.4	—10.6
Selective Service	5,584	2,873	1,049	—48.6	—63.5
State/AID	688,404	869,131	1,072,226	26.3	23.4
Transportation	26,045,224	29,504,864	33,136,170	13.3	12.3
Treasury	9,174,125	10,813,225	11,331,737	17.9	4.8
VA	4,082,973	4,866,420	4,808,418	19.2	—1.2
All Other	1,217,079	1,052,786	1,637,785	—13.5	55.6

*Agency not in existence.

Agency Training Efforts

Chart 19: Training Occurrences

For training of 120 days and less	FY 75	FY 76	FY 77	% Change 75-76	% Change 76-77
TOTAL ALL AGENCIES	863,355	957,327	882,346	10.9	—7.8
Total Defense	383,443	454,127	341,206	18.4	—24.9
Air Force	117,646	142,110	75,186	20.8	—47.1
Army	126,824	151,088	147,691	19.1	—2.2
Navy	105,197	130,141	83,794	23.7	—35.6
Other Defense	33,776	30,788	34,535	—8.8	12.2
Total Non-Defense	479,912	503,200	541,140	4.8	7.5
Action	1,523	1,926	1,754	26.5	—8.9
AEC	2,300	*	*	—	—
Agriculture	81,979	81,295	84,344	—0.8	3.8
Commerce	14,620	15,601	20,291	6.7	30.1
CSC	3,792	3,253	3,583	—14.2	10.1
EEOC	1,231	1,176	1,943	—4.5	65.2
EPA	7,851	6,293	4,335	—19.8	—31.1
ERDA	1,710	3,279	3,464	91.8	5.6
FCC	1,070	1,084	1,005	1.3	—7.3

FDIC	2,103	2,447	3,699	16.4	51.2
FEA	1,306	1,576	1,902	20.7	20.7
FTC	408	756	1,083	85.3	43.3
GAO	4,882	5,677	6,431	16.3	13.3
GPO	1,809	1,089	1,578	—39.8	44.9
GSA	17,270	13,543	13,638	—21.6	0.7
HEW	32,606	50,229	58,012	54.0	15.5
HUD	14,062	11,150	9,927	—20.7	—11.0
Interior	41,219	39,981	32,607	—3.0	—18.4
Justice	23,457	29,556	34,873	26.0	18.0
Labor	5,235	6,387	8,617	22.0	34.9
NASA	17,329	22,107	18,211	27.6	—17.6
NRC	*	910	1,066	—	17.1
Panama Canal	2,277	1,766	1,681	—22.4	—4.8
SBA	2,303	2,095	1,733	—9.0	—17.3
SEC	1,625	435	695	—73.2	59.8
Smithsonian	1,062	1,022	1,000	—3.8	—2.2
Selective Service	1,316	606	10	—54.0	—98.4
State/AID	3,054	2,379	2,642	—22.1	11.1
Transportation	37,840	41,410	47,605	9.4	15.0
Treasury	84,945	71,334	88,579	—16.0	24.2
VA	61,858	76,996	76,882	24.5	0.0
All Other	5,870	5,842	7,950	—0.5	36.1

*Agency not in existence.

Agency Training Efforts

Chart 20: Long-Term Training, FY 1977

For training of more than 120 days

	Training Occurrences	Days of Training	Cost (In Dollars)	% Change of Occurrences FY 76-77	% Change of Cost FY 76-77
TOTAL ALL AGENCIES	741	136,076	3,390,801	—23.6	—22.4
Total Defense	341	61,488	1,668,824	—34.4	—33.9
Air Force	69	13,341	226,231	—33.7	—30.6
Army	118	24,410	884,433	—52.2	—42.4
Navy	77	15,695	388,784	—29.4	—3.8
Other Defense[1]	77	8,042	169,376	28.3	—34.4
Total Non-Defense	400	74,588	1,721,977	—11.1	—6.8
AID	21	3,907	137,616	—8.7	—12.2
Agriculture	42	8,378	259,668	0.0	18.7
Commerce	80	15,443	312,410	—4.8	9.1
ERDA	4	780	16,731	—85.7	—86.1
EPA	11	1,860	57,727	—31.3	6.5
GAO	3	480	2,451	—62.5	—88.1
HEW	67	13,212	306,828	26.4	21.0
HUD	7	1,266	77,177	—22.2	15.6
Interior	10	1,875	61,729	—33.3	37.1
Labor	2	415	26,978	0.0	78.4
Library of Congress	1	260	1,018	—	—
NASA	27	4,836	141,643	—25.0	—15.8
SBA	1	200	13,800	—	—
Transportation	31	6,080	178,168	19.2	12.1
Treasury	2	560	23,401	—75.0	—68.4
USIA	7	1,260	24,295	0.0	13.1
VA	84	13,776	80,337	7.7	—13.4

[1] Includes individuals from the National Security Agency for whom days and cost are unknown.

Agency Training Efforts

Chart 21: Training Provided to Employees of State and Local Governments by Federal Agencies, FY 1977

For training of 120 days and less

Agency	Training Occurrences	Hours of Training	Agency	Training Occurrences	Hours of Training
TOTAL ALL AGENCIES	84,244	2,206,870	HUD	2,876	13,312
Action	534	3,952	Interior	1,357	9,715
Agriculture	6,836	51,490	Justice[1]	3,563	236,302
Air Force	148	1,124	Labor	20,343	422,453
Army	211	4,652	NCUA	96	2,304
CSC	14,263	385,402	NTSB	1	120
Commerce	6,239	119,255	Navy	181	5,121
Other Defense	18	188	NRC	418	18,064
EPA	1,639	59,475	SEC	100	2,700
EEOC	522	8,154	Smithsonian	82	2,190
FDIC	159	15,800	Transportation	9,133	423,399
GSA	3,029	30,514	Treasury[2]	408	24,658
HEW	11,262	363,667	VA	826	2,859

[1] Excludes 286,412 State and local police trained by the FBI and LEAA in FY 1977.

[2] Excludes 36,570 State and local participants in the Bureau of Alcohol, Tobacco and Firearms training in FY 1977.

Index

Summaries:
- A Quick Reference, 2
- Training of 120 Days and Less (Short-term), 11

Agency Training:
- Non-Salary Cost, 48
- Hours of Training, 46
- Long-Term, 52
- Occurrences, 50
- Training Provided to State and Local Government Employees, 53

Costs:
- Direct and Indirect, 2
- Expenditures with Salaries Included:
  - Sources of Training, 25
  - Sources of Training, FY 1975—1977, 27
- Long-Term, 52
- Non-Salary Short-Term Costs:
  - Agency Training, FY 1975—1977, 48
  - Pay Systems, 11
  - Principal Subject Matter, 35
  - Purpose for Training, 33
- Cost per Hour, Average:
  - Pay Systems, 11
  - Pay Systems and Grade Groups, 41
  - Principal Subject Matter, 35
  - Purpose for Training, 33
  - Sexes, 41
  - Sources of Training, 25
  - Sources of Training, FY 1975—1977, 29
- Cost per Occurrence, Average:
  - Pay Systems, 11
  - Pay Systems and Grade Groups, 41
  - Sexes, 41
- Sources of Training, 25
- Sources of Training, FY 1975—1977, 30

Expenditures:
- see Costs

Grade Groups:
- Duty-Time Hours, Percent Spent in Training, 37
- Index of Training Equity, 40
- Cost Per Hour, Average, 41
- Cost Per Occurrence, Average, 41

Hours of Training:
- Agency Training, 46
- Duty-Time Hours, Percent Spent in Training, 37
- Long-Term Training (in days), 52
- Pay Systems, 11
- Principal Subject Matter (graph), 34
- Principal Subject Matter, 35
- Provided to State and Local Government Employees, 53
- Purpose for Training (graph), 32
- Purpose for Training, 33

Sources of Training, 25
Sources of Training, FY 1975—1977, 27
Improving Present Performance:
Summary, 2
see Purpose for Training
Index of Training Equity:
Minorities, 40
Pay Systems and Grade Groups, 40
Sexes, 40
Individuals Trained:
Compared With Occurrences, 2
Pay Systems, 11
In-House Training:
see Sources of Training
Instances of Training:
see Occurrences
Internal Training (In-House):
see Sources of Training
Duty-Time Hours, Percent Spent in Training:
Minorities, 37
Pay Systems and Grade Groups, 37
Sexes, 37
Equity, Index of:
see Index of Training Equity
Executive Development:
Summary, 2
see Subject Matter, Principal
Management Training:
Summary, 2
see Subject Matter, Principal
Minorities:
Duty-Time Hours, Percent Spent in Training, 37
Index of Training Equity, 40
Non-Government:
see Sources of Training
Occurrences:
Agency Training, FY 1975—1977, 50
Definition, 2
Long-Term, 52
Pay Systems, 11
Principal Subject Matter, 35
Provided to State and Local Government Employees, 53
Purpose for Training, 33
Sources of Training, 25
Off-the-Shelf Training (Standard Cataloged Courses):
see Sources of Training
Participation:
see Occurrences
Pay Systems:
Cost Per Hour, Average, 11, 41
Cost Per Occurrence, Average, 11, 41
Duty-Time Hours, Percent Spent in Training, 37
Length Per Occurrence, Average:
Pay Systems, 11
Principal Subject Matter, 35
Purpose for Training, 33
Sources of Training, 25

Sources of Training, FY 1975-1977, 28
Long-Term Training:
Cost, 52
Days, 52
Occurrences, 52
Population:
Pay Systems, 11
Purpose for Training:
Cost Per Hour, Average, 33
Hours of Training (graph), 32
Hours of Training, 33
Length Per Occurrence, Average, 33
Non-Salary Costs, 33
Occurrences, 33
Sexes Trained:
Cost Per Hour, Average, 41
Cost Per Occurrence, Average, 41
Duty-Time Hours, Percent Spent in Training, 37
Index of Training Equity, 40
Sources of Training:
Cost Per Hour, Average, 25
Cost Per Hour, Average, FY 1975--1977, 29
Cost Per Occurrence, Average, 25
Cost Per Occurrence, Average, FY 1975—1977, 30
Expenditures, 25
Expenditures, FY 1975—1977, 27
Hours of Training, 25
Hours of Training, FY 1975—1977, 27
Length Per Occurrence, Average, 25
Length Per Occurrence, Average, FY 1975—1977, 28
Long-Term Training, 52
Occurrences, 25
Summary Comparison Among Sources, 25
Specially Developed Training:
see Sources of Training
State and Local Governments:
Training Provided to State and Local Governments by Federal Agencies, 53
Training Received by Federal Employees From State and Local Goverments:
see Sources of Training
Subject Matter, Principal:
Cost Per Hour, Average, 35
Hours of Training (graph), 34
Hours of Training, 11
Index of Training Equity, 40
Individuals Trained, 11
Length Per Occurrence, Average, 11
Occurrences, 11
Population, 11
Type of Training:
see Subject Matter, Principal